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EXAMINER	
JIANG, YONG HANG	

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2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,588	BLAKER ET AL.	
	Examiner	Art Unit	
	Yong Hang Jiang	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/7/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-5, 8-10, 12-17, 19, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al. (US 6,271,765).

Regarding claim 1, King et al. disclose a wireless control system (via transmitter system 20) for customizing a wireless control signal for a remote electronic system (gate 44A associated with receiver 42A) based on the location of the wireless control system, comprising:

a transmitter circuit (via transmitter 22) configured to transmit the wireless control signal having control data which will control the remote electronic system (gate 44A associated with receiver 42A); an interface circuit (via sensor 30) configured to receive navigation data from a navigation data source (GPS receiver); and a control circuit (Processor 26) coupled to the transmitter circuit and the interface circuit configured to receive a transmit command (from processor 26 based on location), to receive navigation data, to determine a current location based on the navigation data (via sensor 30 determines the position of the transmitter system 20 relative to earth), and to command the transmitter circuit to transmit a wireless control signal associated with the current location (via transmitter 22 on transmitter system 20 transmits a signal

associated with receiver 42A based upon the position). (See Col. 1 line 50 to Col. 2, line 61)

Regarding claim 4, King et al. disclose the control circuit (processor 26) is operable in a training mode to record location data and wireless control signals in sets of data pairs (via the processor 26 includes storage 27A-C for storing a plurality of locations associated with gates 44A-C for operation), wherein each set of data pairs represents a location proximate to a remote electronic system associated with the wireless control signal stored in the data pair (via predetermined distance such as one hundred feet of one of the gates 44A-C). (See Col. 2, lines 5-16; and Col. 2, lines 35-45)

Regarding claim 5, King et al. disclose the control circuit (processor 26) is inherently configured to search a plurality of data pairs (via stored control data associated with each gate and location of each gate) to compare a current location to the location proximate to the remote electronic system stored in each data pair, and the control circuit is configured to command the transmitter to transmit the wireless control signal from a data pair when a location proximate to the remote electronic system for that data pair is proximate to the current location. (See Col. 2, lines 5-16; and Col. 2, lines 35-45)

Regarding claim 8, King et al. disclose a method of training a wireless control system (via transmitter system 20) on a vehicle (40) for wireless control of a remote electronic system (gate 44A associated with receiver 42A) based on the location of the vehicle, comprising: receiving a request to begin training from a user (via activating user input device 34); receiving a current location for the vehicle (via GPS receiver on sensor

30); providing control data (via processor 26) for a signal to be sent wirelessly for a remote electronic System (gate 44A associated with receiver 42A); and associating the current location for the vehicle with the wireless control signal for the remote electronic system (via storage 27A storing the location of the transmitter system 20 and the vehicle 40 at the time the learning mode button 34 is pressed). (See Col. 3, lines 5-13; and Col. 1, line 50 to Col. 2, line 61)

Regarding claim 9, King et al. disclose the request to begin training is received via a pushbutton (via learning mode button on user input device 34). (See Col. 3, lines 5-13)

Regarding claim 10, King et al. disclose the method further comprising receiving an indication from the user as to which of a plurality of wireless control signals is to be transmitted based on the location of the vehicle (via storage 27A storing the location of the transmitter system 20 and the vehicle 40 at the time the learning mode button 34 is pressed). (See Col. 3, lines 5-13)

Regarding claim 12, King et al. disclose a method of transmitting a wireless control signal (via transmitter system 20) for controlling a remote electronic system (via gates 44A-C associated with receivers 42A-C) based on the location of a vehicle (40), comprising: receiving a current location for the vehicle (via GPS receiver on sensor 30); comparing the current location of the vehicle with a plurality of stored locations (via processor 26 compares the current location with the locations stored on storage 27A-C), each location associated with a wireless control signal (via control signals associated with the locations of gates 44A-C); determining the wireless control signal associated

with the stored location closest to the current location (via processor 26 receiving location and velocity data from sensor 30 to determine which control signal to send); and transmitting the wireless control signal associated with the stored location closest to the current location (via transmitter 22 on transmitter system 20). (See Col. 1 line 50 to Col. 2, line 61; and Col. 3, lines 5-13)

Regarding claim 13, King et al. disclose transmitting the wireless control signal associated with the stored location closest to the current location includes transmitting the wireless signal only upon determining that the current location is within a predefined distance of the stored location. (See Col. 2, lines 36-45)

Regarding claim 14, King et al. disclose the control data is configured to control a garage door opener (via gates 44A-C). (See Col. 2, lines 17-34)

Regarding claim 15, King et al. disclose the step of transmitting includes transmitting a plurality of wireless control signals (control signals associated with gates 44A-C) having different control data which will control a plurality of remote electronic systems (receivers 42A-C associated with gates 44A-C) when the comparing the current location of the vehicle with a listing of stored locations indicates that the vehicle is near the remote electronic systems. (See Col. 2, lines 17-61)

Regarding claim 16, King et al. disclose the navigation data source is a vehicle compass (via GPS receiver). (See Col. 1, lines 59-67)

Regarding claim 17, King et al. disclose a transmitter (via transmitter system 20) for wirelessly controlling a plurality of remote electronic systems (via gates 44A-C associated with receivers 42A-C) at one of a plurality of locations, comprising:

a memory (via storage 27A-C) configured to store a plurality of control data messages and a plurality of locations, each control data message configured to control a different remote electronic system (via control signals for gates 44A-C associated with receivers 42A-C), the memory configured to associate each location with a plurality of control data messages (via different control signals stored on by transmitter system 20 when vehicle 40 is traveling away or towards gates 44A-C); a transmitter circuit (via transmitter 22); and a control circuit (via processor 26) configured to command the transmitter circuit to transmit a plurality of wireless control signals in response to a single event (via within a distance of gates 44A-C), each wireless control signal containing a different control data message (via control signals associated with gates 44A-C). (See Col. 1, line 50-Col. 2, line 61; and Col. 3, lines 5-14)

Regarding claim 19, King et al. disclose the control circuit (processor 26) is configured to receive navigation data (via sensor 30) and to determine a proximity between the transmitter and the remote electronic systems, wherein the single event is the control circuit determining that the transmitter is within a predetermined proximity (such as one hundred feet of one of the gates 44A-C) of the remote electronic systems. (See Col. 1, line 59 to Col. 2, line16; and Col. 2, line 35-61)

Regarding claim 23, King et al. disclose the control circuit (processor 26) is configured to be programmed by the user as to which of the wireless control signals are to be transmitted in response to the single event (within one hundred feet). (See Col. 3, lines 5-13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2-3, 18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. as applied to claims 1, 17, and 19 respectively, and further in view of Dykema et al. (US 6,091,343).

Regarding claims 2-3 and 21-22, King et al. disclose the structural elements of the claimed invention but failed to disclose a vehicle interior element coupled to the transmitter circuit and the control circuit, wherein the wireless control system is configured for mounting in a vehicle interior, and the vehicle interior element is an overhead console, a visor, or an instrument panel,

Dykema et al. teach a vehicle wireless transmitter system that is mounted within the vehicle overhead console. (See Col. 4, line 64 to Col. 5 line 12, Figure 1)

From the teachings of Dykema et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of King et al. to include a vehicle interior element coupled to the transmitter circuit and the control circuit such as an overhead console for mounting in a vehicle interior in order to protect the transmitter and the control circuit from environmental hazards in the surroundings.

Regarding claim 18, King et al. disclose the structural elements of the claimed invention but failed to disclose an operator input device, wherein the single event is the actuation of the operator input device by a vehicle occupant.

Dykema et al. teach a trainable transmitter on a vehicle with pushbutton switches (44, 46, and 47) to remotely control garage door opening systems as well as other devices that may be remotely controlled in response to an RF signal. (See Col. 3, lines 17-21; Col. 4, line 64 to Col. 5, line 12; and Col. 5, lines 49-54)

From the teachings of Dykema et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitter of King et al. to include an operator input device, wherein the single event is the actuation of the operator input device by a vehicle occupant in order to provide manual switches for a user to operate and control devices that may be remotely controlled.

Regarding claim 20, King et al. disclose the control circuit (processor 26) automatically sends a first wireless control signal having a first control data message

(via control signal for gate 44A associated with receiver 42A) when the control circuit determines that the transmitter is within a predetermined proximity (within one hundred feet) of the remote electronic system (gate 44A associated with receiver 42A). (See Col. 2, lines 36-45)

But king et al. failed to disclose an operator actuatable switch coupled to the control circuit, wherein the control circuit is user-programmable such that the switch causes the transmitter to send a second wireless control signal having a second control data message different than first control data message.

Dykema et al. teach a trainable transmitter on a vehicle with pushbutton switches (44, 46, and 47) to remotely control garage door opening systems as well as other devices that may be remotely controlled in response to an RF signal. (See Col. 3, lines 17-21; Col. 4, line 64 to Col. 5, line 12; and Col. 5, lines 49-54)

From the teachings of Dykema et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitter of King et al. to include an operator actuatable switch coupled to the control circuit, wherein the control circuit is user-programmable such that the switch causes the transmitter to send a second wireless control signal having a second control data message different than first control data message in order to remotely control other devices that may be remotely controlled in response to an RF signal.

6. Claims 6-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. as applied to claims 1 and 8 above, and further in view of Duckworth et al. (US 5,646,701).

Regarding claim 6, King et al. disclose the structural elements of the claimed invention but failed to disclose the wireless control system further comprising a receiver circuit configured to receive a wireless signal, wherein the control circuit is configured to identify and store a data code on the wireless signal, wherein the wireless control signal transmitted by the transmitter circuit includes the stored data code.

Duckworth et al. teach a trainable transceiver providing an integrated trainable transmitter and control system receiver for a vehicle electrical system. The transceiver includes an input circuit to receive radio frequency signals from a garage door opener remote control in a training mode and from a separate transmitter in a transmitter detection mode. (See the Abstract and Col. 2, line 58 to Col. 3, line 19)

From the teachings of Duckworth et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless control system of King et al. to include a receiver circuit configured to receive a wireless signal, wherein the control circuit is configured to identify and store a data code on the wireless signal, wherein the wireless control signal transmitted by the transmitter circuit includes the stored data code in order to operate a remote control system associated with the wireless signal on the wireless control system of King et al.

Regarding claim 7, the combination of King et al. and Duckworth et al. disclose the claimed invention wherein King et al. disclose the control circuit is further configured to automatically associate (via learning mode button on user input device 34) a location with the stored data code and to store the location in a data pair with the stored data code. (See Col. 3, lines 5-13)

Regarding claim 11, King et al. disclose the wireless control system (transmitter system 20) can wirelessly control the remote electronic system (gate 44A associated with receiver 42A) by transmitting a data code of a wireless signal (via transmitter 22 transmitting a signal associated with gate 44A). (See Col. 2, lines 35-41)

But King et al. failed to disclose the method further comprising receiving a wireless signal having a data code; and identifying and storing the data code on the wireless signal.

Duckworth et al. teach a method of using a trainable transceiver providing an integrated trainable transmitter and control system receiver for a vehicle electrical system. The transceiver includes an input circuit to receive radio frequency signals from a garage door opener remote control in a training mode and from a separate transmitter in a transmitter detection mode. (See the Abstract and Col. 2, line 58 to Col. 3, line 19)

From the teachings of Duckworth et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of King et al. to include receiving a wireless signal having a data code; and identifying and storing the data code on the wireless signal in order to use the wireless control system of King et al. on other remote control systems.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over King et al. as applied to claim 17 above, and further in view of Dykema et al. (US 6,091,343) and Wolf et al. (US 5,583,844).

Regarding claim 24, King et al. disclose the structural elements of the claimed invention but failed to disclose the transmitter further comprising a plurality of operator-actuatable switches coupled to the control circuit, wherein the control circuit is user-programmable such that a first of the switches causes the transmitter to send a first wireless control signal and a second of the switches causes the transmitter to send second and third wireless control signals simultaneously or in sequence.

Dykema et al. teach a trainable transmitter on a vehicle with pushbutton switches (44, 46, and 47) to remotely control garage door opening systems as well as other devices that may be remotely controlled in response to an RF signal. (See Col. 3, lines 17-21; Col. 4, line 64 to Col. 5, line 12; and Col. 5, lines 49-54)

From the teachings of Dykema et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmitter of King et al. to include a plurality of operator-actuatable switches coupled to the control circuit, and a first of the switches causes the transmitter to send a first wireless control signal in order to provide manual switches for a user to operate and control devices that may be remotely controlled.

The combination of King et al. and Dykema et al. disclose the structural elements of the claimed invention but failed to disclose the control circuit is user programmable such that a second of the switches causes the transmitter to send second and third wireless control signals simultaneously or in sequence.

Wolf et al. teach programming a computerized vehicle control system to initialize vehicle operation, monitor vehicle status and execute one of a plurality of ride programs by loading a sequence of data. (See Col. 48, lines 24-37)

From the teachings of Wolf et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of King et al. and Dykema et al. to include making the control circuit user programmable such that a second of the switches causes the transmitter to send second and third wireless control signals simultaneously or in sequence in order to control multiple devices at once.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Hang Jiang whose telephone number is 571-270-3024. The examiner can normally be reached on M-F 7:30 am to 5:30 pm alternate fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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